IN THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

WE CLAIM:

1. (Currently amended) A centrifugal drum for a separator having a vertical axis of rotation, comprising:

a drum bottom part and a drum cover fastened to the drum bottom part by a locking ring, ~~and~~

a centering ring arranged radially between the drum bottom part and the drum cover and axially between the drum cover and the locking ring such that while the centering ring is being pretensioned by movement of the locking ring relative to the drum cover, it sealingly and centeringly braces the drum bottom part and the drum cover relative to one another; and

wherein the centering ring includes an elastically deformable material.

2. (Previously Presented) The centrifugal drum according to Claim 1, wherein the drum cover engages in the drum bottom part, and the centering ring is arranged between an outer circumference of the drum cover and an inner circumference of the drum bottom part, the centering ring being configured such that the centering and sealing is maintained during an operation to a maximal rotational speed of the separator.

3. (Previously Presented) The centrifugal drum according to Claim 1, wherein the centering ring, is axially pretensioned and arranged between an outer circumference of the drum cover and an inner circumference of the drum bottom part.

4. (Cancelled)

5. (Previously Presented) The centrifugal drum according to Claim 1, wherein the centering ring includes elastically deformable material and is arranged between an outer circumference of the drum cover and an inner circumference of the drum bottom part.

6. (Previously Presented) The centrifugal drum according to Claim 1, wherein an inner collar on an inner circumference of an upper ring section of the drum bottom part, on which inner collar a correspondingly complementarily shaped outer collar rests and which complementarily shaped outer collar is situated on an outer circumference of a lower ring section of the drum cover.

7. (Previously Presented) The centrifugal drum according to Claim 1, including a pressure element which acts upon the centering ring and presses the centering ring upon a collar at least one of at the drum cover and at the drum bottom part.

8. (Previously Presented) The centrifugal drum according to Claim 1, wherein the centering ring is arranged above an outer collar of the drum cover.

9. (Previously Presented) The centrifugal drum according to Claim 1, wherein a ring disk is dimensioned such that it covers a gap between an inner circumference of the drum bottom part and an outer circumference of the drum cover in an area above a collar, and rests on a step of the drum bottom part in an inward direction.

10. (Previously Presented) The centrifugal drum according to Claim 1, wherein, by dimensioning a width and a height of a gap for the centering ring between the drum bottom part and the drum cover, and by dimensioning and selecting a material of the centering ring, a radial spring effect of the centering ring is adjusted such that the centering and sealing in an operation of the drum is maintained to a maximal rotational speed of the separator.

11. (Previously Presented) The centrifugal drum of Claim 4, wherein the elastically deformable material includes rubber.

12. (Previously Presented) The centrifugal drum of Claim 7, wherein the pressure element acts upon the centering ring from above the centering ring.

13. (Cancelled)

14. (Previously Presented) The centrifugal drum of Claim 7, wherein the pressure element includes a ring disk.

15. (Currently Amended) A centrifugal drum for a separator having a vertical axis of rotation, comprising:

a drum bottom part and a drum cover fastened to the drum bottom part by a locking ring;

a centering ring arranged radially between the drum bottom part and the drum cover and axially between the drum cover and the locking ring such that while the centering ring is being pretensioned by movement of the locking ring relative to the drum cover, it sealingly and centeringly braces the drum bottom part and the drum cover relative to one another; and

wherein the drum cover engages in the drum bottom part and the centering ring is arranged directly between an outer circumference of the drum cover and an inner circumference of the drum bottom part, the centering ring being configured such that the centering and sealing is maintained during an operation to a maximal rotational speed of the separator.

16. (Currently Amended) A centrifugal drum for a separator having a vertical axis of rotation, comprising:

a drum bottom part and a drum cover fastened to the drum bottom part by a locking ring;

a centering ring arranged radially between the drum bottom part and the drum cover and axially between the drum cover and the locking ring such while the centering ring

is being pretensioned by movement of the locking ring relative to the drum cover, it sealingly and centeringly braces the drum bottom part and the drum cover relative to one another, and

wherein in an installed position, a pressure element acts upon the centering ring and presses the centering ring upon a collar portion of the drum cover.

17. (Previously Presented) The centrifugal drum of Claim 16, wherein the pressure element includes a ring disk.

18. (Previously Presented) The centrifugal drum of Claim 1, further including a pressure element.

19. (New) The centrifugal drum of Claim 16, wherein the collar portion is located on an outer circumference of the drum cover.